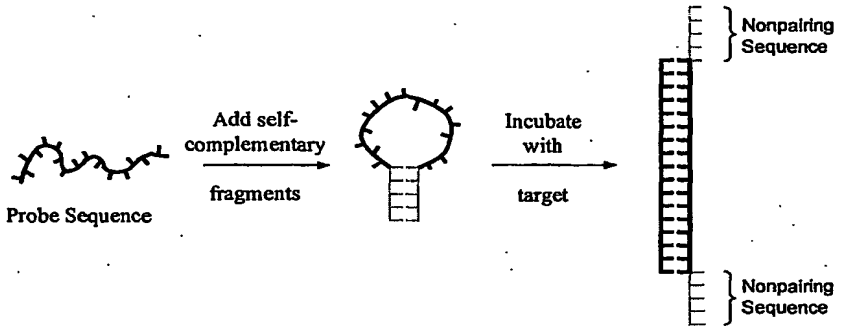


(PRIOR ART)

Figure 1

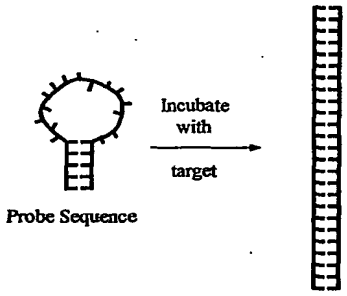


Figure 2

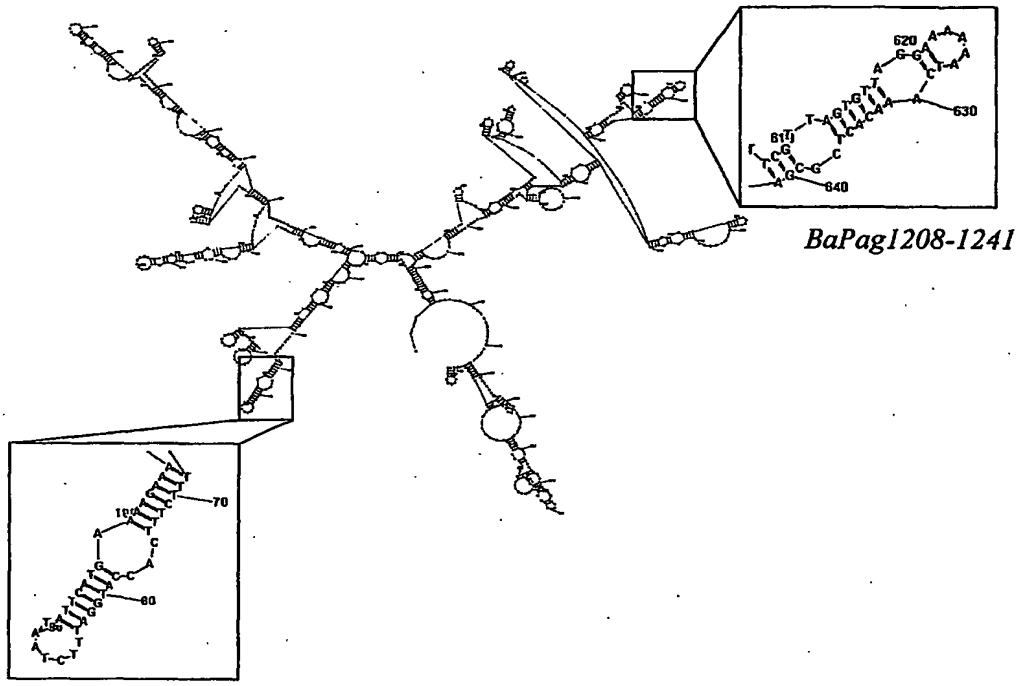
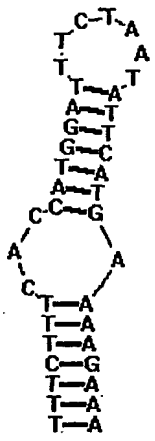
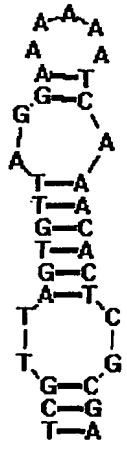


Figure 3



Pag 668 – 706
$E_{predict}$ = -4.4 kcal/mol
nt count = 39

Figure 4A



Pag 1208 - 1241
$E_{predict}$ = -4.7 kcal/mol
nt count = 34

Figure 4B

Sequences producing significant alignments:	Score (bits)	E Value
gi|20520075|gb|AE011190.1| Bacillus anthracis str. A2012 pl...	78	7e-13
gi|16031494|emb|AJ413937.1|BAN413937 Bacillus anthracis par...	78	7e-13
gi|16031492|emb|AJ413936.1|BAN413936 Bacillus anthracis par...	78	7e-13
gi|9280532|gb|AF268967.1|AF268967 Bacillus anthracis plasmi...	78	7e-13
gi|48942161|gb|AF065404.1| Bacillus anthracis virulence plas...	78	7e-13
gi|10880952|gb|AF306783.1| Bacillus anthracis isolate BA102...	78	7e-13
gi|10880950|gb|AF306782.1| Bacillus anthracis plasmid pX01 ...	78	7e-13
gi|10880948|gb|AF306781.1| Bacillus anthracis isolate 33 pr...	78	7e-13
gi|10880946|gb|AF306780.1| Bacillus anthracis isolate BA103...	78	7e-13
gi|10880944|gb|AF306779.1| Bacillus anthracis isolate 28 pr...	78	7e-13
gi|10880942|gb|AF306778.1| Bacillus anthracis plasmid pX01 ...	78	7e-13
gi|1432801|gb|M22589.1|BACPAG Bacillus anthracis cryptic pro...	78	7e-13
gi|18308294|gb|AC104301.2| Homo sapiens chromosome 3 clone ...	42	0.038
gi|19033969|gb|AC069286.7| Homo sapiens BAC clone RP11-261N...	40	0.15
gi|34849950|gb|AC107065.5| Bos taurus clone rp42-513g13, co...	40	0.15
gi|30962756|gb|AC137820.11| Medicago truncatula clone mth2-...	38	0.60
gi|30522931|gb|AC123948.4| Mus musculus chromosome 10 clone...	38	0.60
gi|22552809|emb|AL671857.16| Mouse DNA sequence from clone ...	38	0.60
gi|11414543|emb|AL355352.16| Human DNA sequence from clone ...	38	0.60
gi|7768715|dbj|AP001713.1| Homo sapiens genomic DNA, chromo...	38	0.60
gi|4827077|dbj|AP000178.1| Homo sapiens genomic DNA, chromo...	38	0.60
gi|4835635|dbj|AP000266.1| Homo sapiens genomic DNA, chromo...	38	0.60
gi|3132344|dbj|AP000034.1| Homo sapiens genomic DNA, chromo...	38	0.60
gi|4730836|dbj|AP000102.1| Homo sapiens genomic DNA of 21q2...	38	0.60
gi|3947430|gb|AC003090.1| Homo sapiens BAC clone CTA-241I2 ...	36	2.4

Figure 5

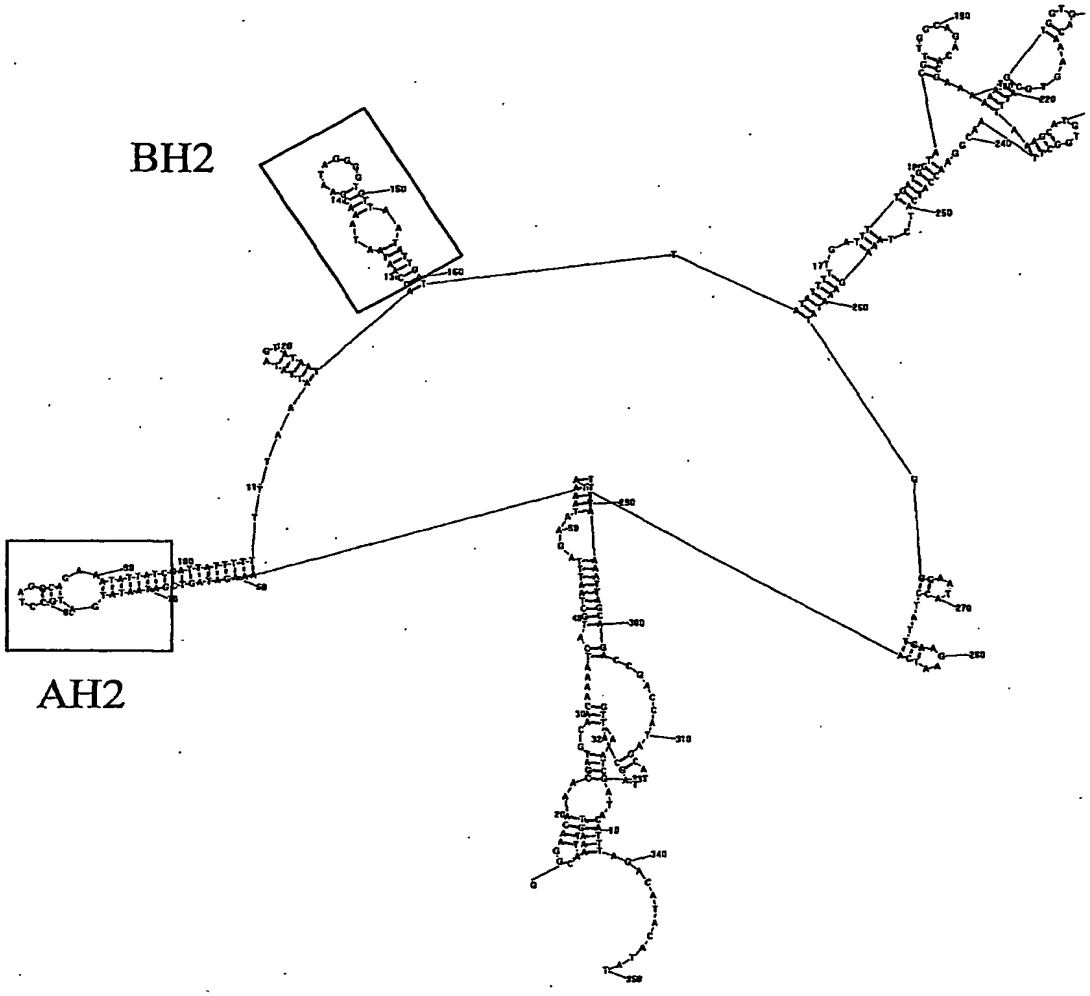


Figure 6

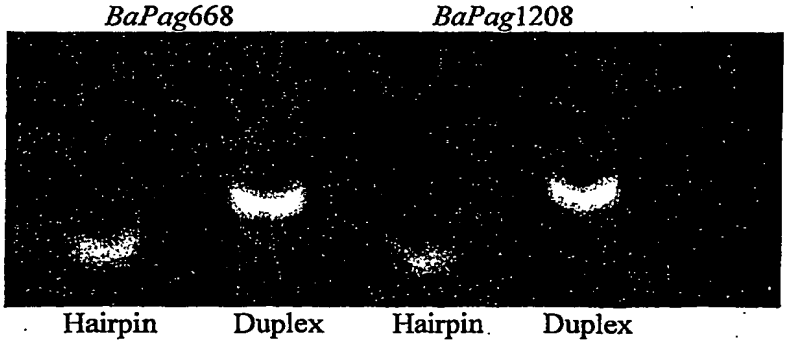
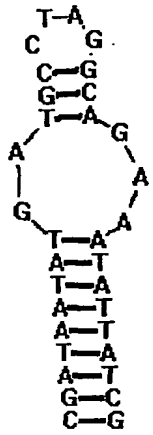


Figure 9

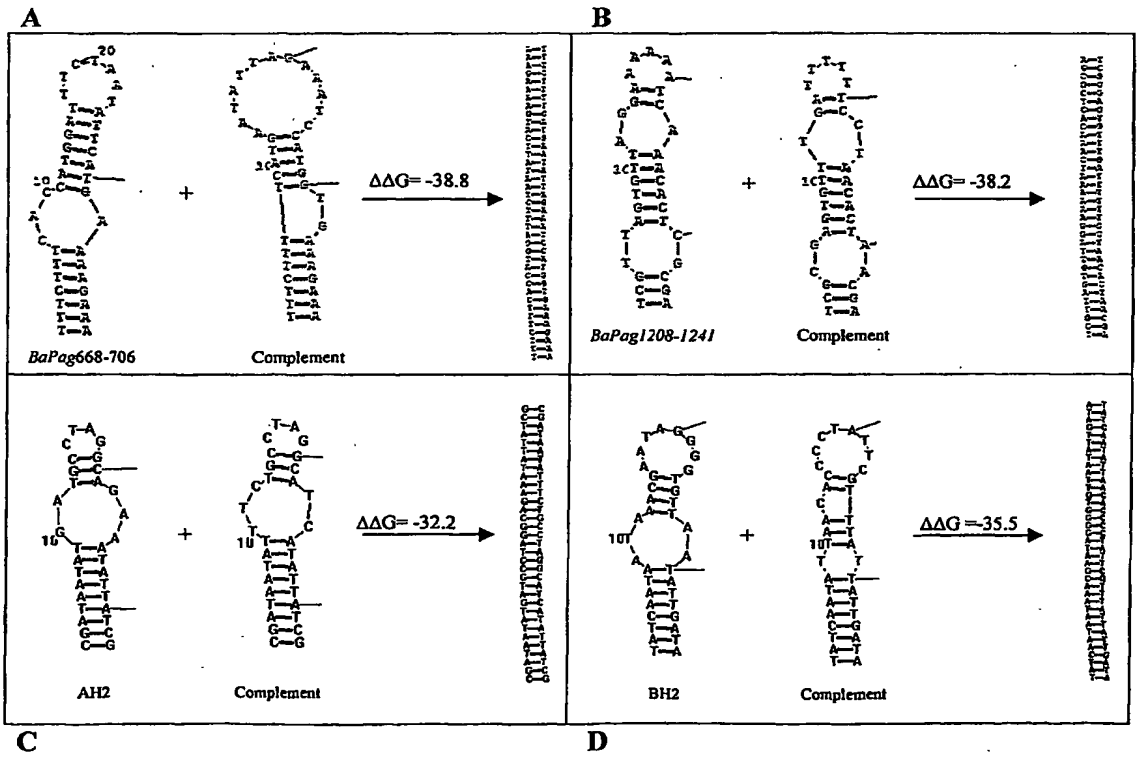


AH2
($E_{predict}$ = -6.1 kcal/mol)
nt = 33

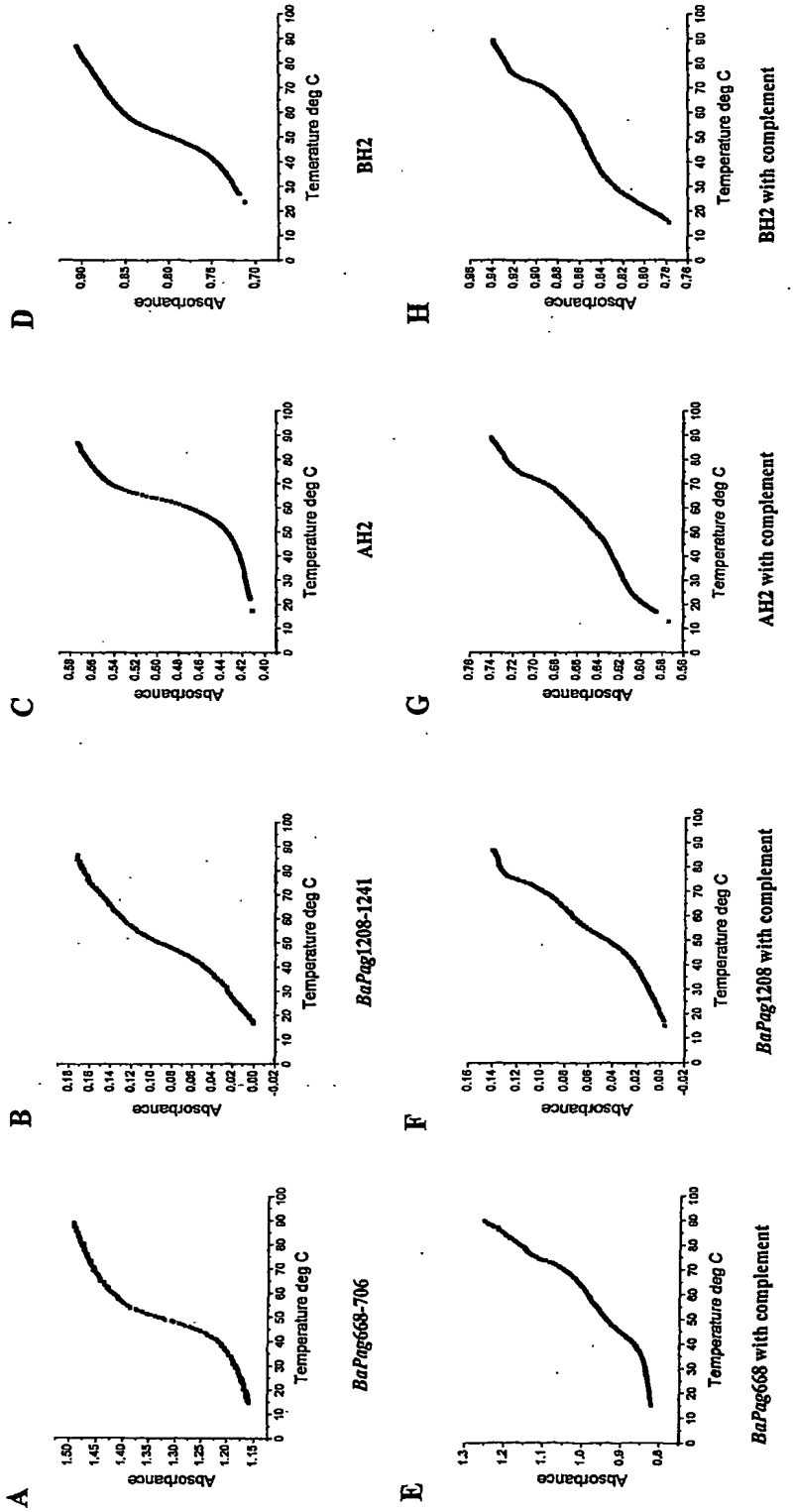
Figure 7A

BH2
($E_{predict}$ = -3.5 kcal/mol)
nt = 37

Figure 7B



Figures 8A-D



Figures 10A-H

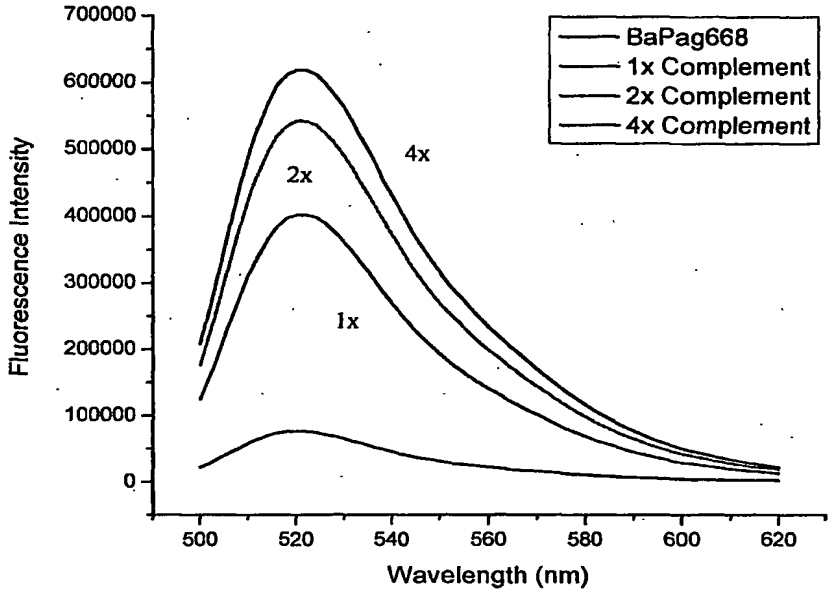
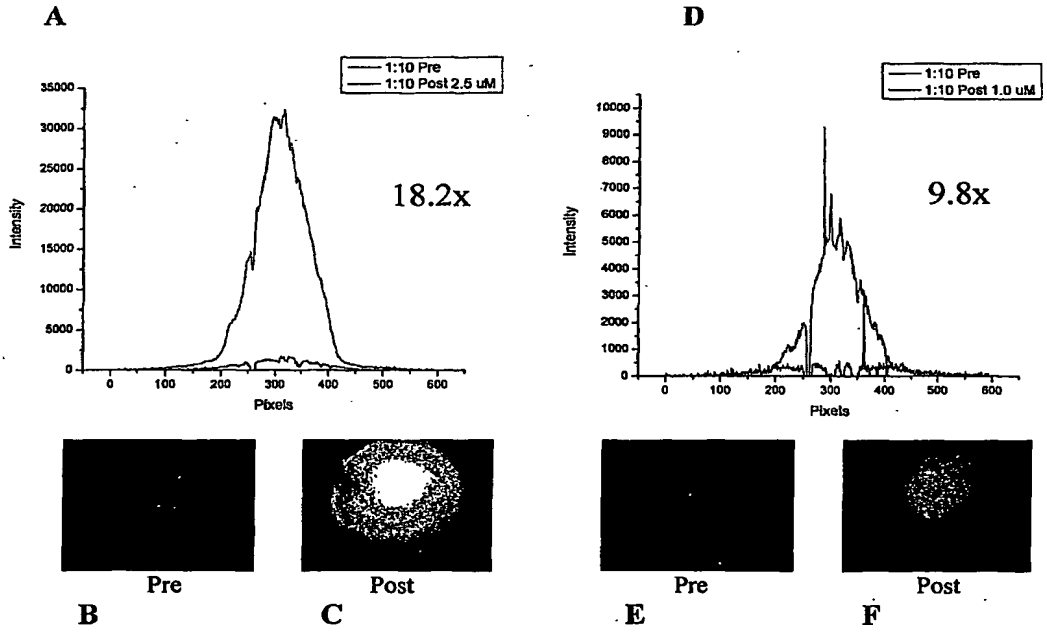
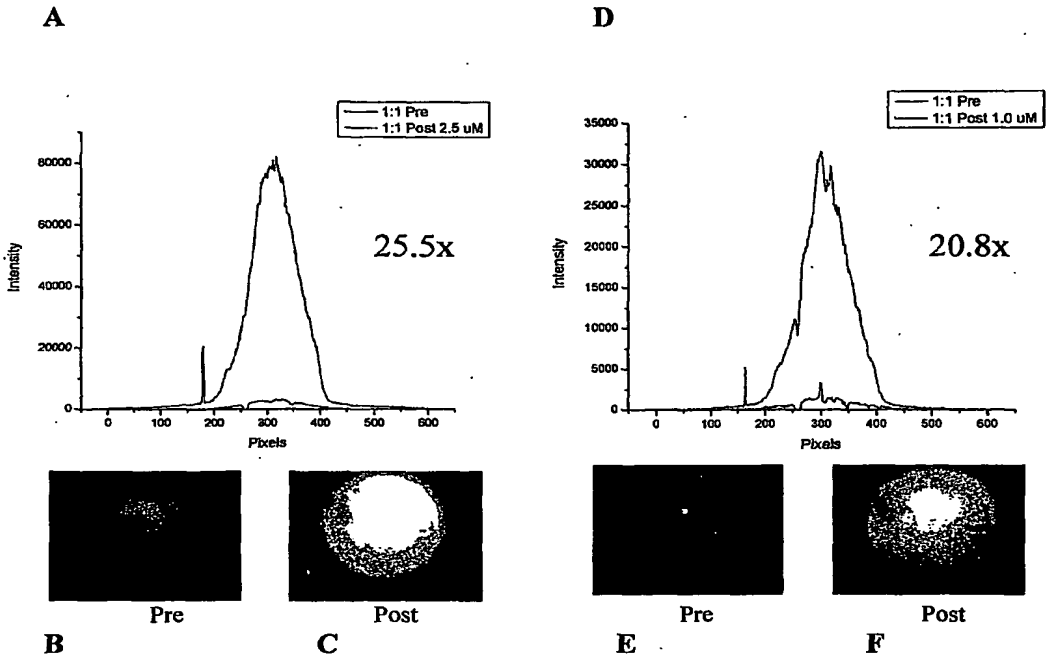


Figure 11



Figures 12A-F



Figures 13A-F

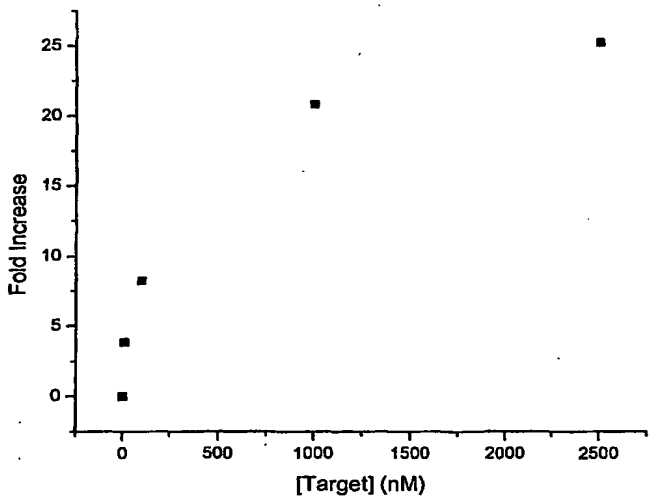
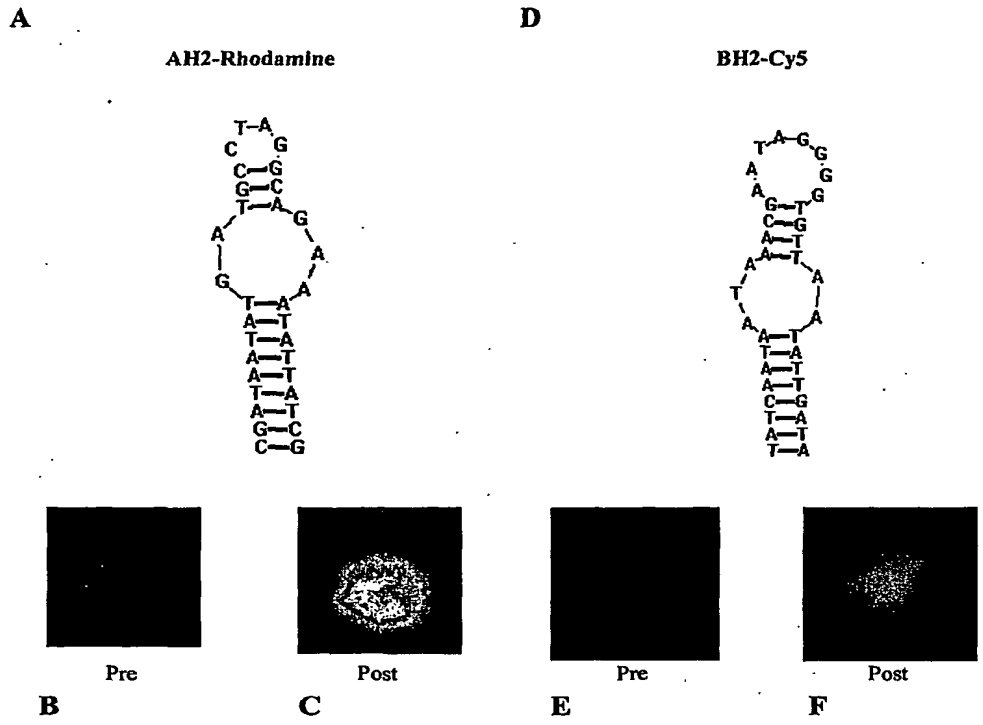
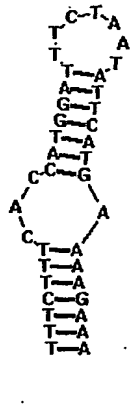
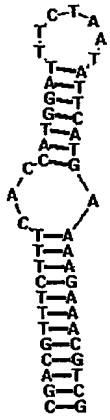


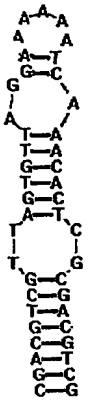
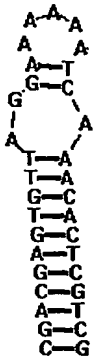
Figure 14



Figures 15A-F

A	B	C
		
*BaPag*668	*BaPag*668 + CGACG	*BaPag*673 + CGACG
ΔG_{hp} = -4.4	ΔG_{hp} = -12.9	ΔG_{hp} = -7.3
ΔG_{dup} = -43.2	ΔG_{dup} = -43.2	ΔG_{dup} = -32.5
$\Delta\Delta G$ = -38.8	$\Delta\Delta G$ = -30.3	$\Delta\Delta G$ = -25.2
Complement: TTTCT TTTCA TGAAT ATTAG AAATC CATGG TGAAA GAAA		

Figures 16A-C

A	B	C
		
*BaPag*1208	*BaPag*1208 + CGACG	*BaPag*1213 + CGACG
ΔG_{hp} = -4.7	ΔG_{hp} = -13.2	ΔG_{hp} = -11.3
ΔG_{dup} = -42.6	ΔG_{dup} = -42.8	ΔG_{dup} = -33.7
$\Delta\Delta G$ = -38.2	$\Delta\Delta G$ = -29.6	$\Delta\Delta G$ = -22.4
Complement: TCGCG AGTGT TTGAT TTTTT CCTAA CACTA ACGA		

Figures 17A-C